

ABSTRACT OF THE DISCLOSURE

A vapor deposition source for use in vacuum chamber for coating an organic layer on a substrate of an OLED device, includes a manifold including side and bottom walls defining a chamber for receiving organic material, and an aperture plate disposed between the side walls, the aperture plate having a plurality of spaced apart apertures for emitting vaporized organic material; the aperture plate including conductive material which in response to an electrical current produces heat; means for heating the organic material to a temperature which causes its vaporization, and heating the side walls of the manifold; and an electrical insulator coupling the aperture plate to the side walls for concentrating heat in the unsupported region of the aperture plate adjacent to the apertures, whereby the distance between the aperture plate and the substrate can be reduced to provide high coating thickness uniformity on the substrate.

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